

ABSTRACT

THE EFFECT OF CHITOSAN CONCENTRATION ON CHARACTERISTICS OF SPRAY GEL SPRAY AS WOUND HEALING

Lintang Indra Sukmawati

Chitosan is a polysaccharide consisting of glucosamine and N-acetylglucosamine which can be used as wound healing. *Piper betle* L. extract which has activity as antibacterial can be used to improve the effectiveness of chitosan as wound healing agent. The spray gel can be used as the preferred dosage form for the wound healing as it can reduce the pain when delivering the drug to the wound. The spray gel has characteristics such as organoleptic, viscosity, spreadability, drying time and pH. The results showed that the addition of chitosan can affect the spray gel characteristics such as viscosity, pH, spreadability and drying time. In the stability test, showed that the viscosity was decreased, pH was stable, the spreadability and the drying time was increased.

Keywords : chitosan, *Piper betle* L, spray gel, wound healing.